

**William Beckenbaugh, PhD
President & CEO
Lowell, MA**



Konarka
technologies

From light to power

November 2003



From Light to Power

New generation of very low cost photovoltaics



- World energy consumption continues to increase
- Continue trend toward distributed power
- Renewable energy source – no environmental impact
- World Without Wires™ – true wireless



The Team

Demonstrated experience in technology

Board of Directors

- Howard Berke – Chairman
Serial Entrepreneur, 12th Start-up Company
- Bill Beckenbaugh, PhD – CEO
Sanmina-SCI, HADCO, Motorola, Lucent
- Raj Atluru – Draper Fisher Jurvetson
- Bic Stevens – Zero Stage Capital
- Alan Heeger, PhD – Nobel Laureate

Senior Management

- Daniel McGahn – EVP BD & CMO
Hyperion COO and GM
- Randy Chan – VP MFG & ENG
Raychem, Avery Dennison, E-Ink
- Russ Gaudiana, PhD – VP R&D
Polaroid
- Kevin McGuire – Controller

Scientific Advisory Board

- Alan Heeger, PhD,
UCSB, Nobel Laureate Chemistry
- Serdar Sariciftci, PhD
Linz Inst. for Organic Solar Cells
- Michael Graetzel, PhD
EPFL, father of dye-based cells
- Allan Bard, PhD,
UT-Austin, Priestley Medal
- Jack Hanoka, PhD
CTO Evergreen Solar
- Elliot Berman, PhD,
founder SPC, CTO Arco Solar

Science/Technology Team

- 10 PhDs & 6 MS
(Polymer Chemistry & Material Science)
- 200+ Yrs Industrial R&D Experience

Development of the Company

Significant events

- 2001

- Company founded
- License from UMass
- Seed Round Financing



Konarka Technologies, Inc.
Lowell, MA USA

Konarka GmbH
Linz, Austria

Konarka SA
Switzerland

- 2002

- License from EPFL
- B Round Financing
- Partnerships established with **ChevronTexaco** and **EASTMAN**
- Acquired QSEL, now Konarka GmbH
- Mass Renewable Energy Trust funding



DRAPER FISHER JURVETSON

ChevronTexaco and **EASTMAN**

- 2003

- European subsidiaries established
- Electricite de France relationship established
- Silicon Valley Bank capital line





Focusing on Scale Up & Partnering

Leveraging our strengths

- Manufacturing focus
 - Low cost, high throughput, non-vacuum, roll-to-roll process
 - Manufacturing Technology Development Team – 100+ years R2R implementation experience
- Intellectual Property Estate: 2 Fundamental Solar Cell Technology Platforms (40+ patents)
 - EPFL – Dye sensitized solar cell (DSC) & UMass – low temperature reactive Titania sintering
 - Heeger Polymer-C60 fullerene solar cell
 - Konarka developed intellectual property
- Go to market with flexible DSC products in 2005



World Without Wires™

Nanotechnology Enabled Photovoltaics

- Very low cost ($< \$1/W$) portable power
- Highly scalable manufacturing (low capital expense)
- Rapid technical progress (beyond scientific literature)
 - Plastic Dye Cell at 7+% (go to market)
 - Polymer-C60 cell at 4% (pilot in 2006)
- Global JV and Channel partners
- Commercial shipments in 2005 (5+% efficient modules)
- Cash flow positive in Q4 2007 / Q1 2008